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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,180	10/16/2001	Pei K. Chang	2105.2135	7984
47050	7590	04/11/2005	EXAMINER	
RYNDAK & SURI 30 NORTH LASALLE STREET SUITE 2630 CHICAGO, IL 60602			PRATT, HELEN F	
			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/982,180	Applicant(s) CHANG ET AL.	
	Examiner Helen F. Pratt	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-17, 19-39, 41-59, 62-73, 75-82, 84-87, 89-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-17, 19-39, 41-59, 62-73, 75-82, 84-87, 89-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-17, 19-39, 41-59, ^{60,}62 -73, 75-82, 84-87, 89-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gandhi (5,851,578) in view of Yang et al. (US 2002/014686 a1), Braun et al. (4,830,862) and Burkes et al. (5,401,524).

Gandhi discloses as in claim 1, a method of making a beverage which can be artificially sweetened, and is supplemented with calcium and that can be a concentrate made by combining calcium carbonate with lactic acid and water, citric acid is added, and then the flavor, and sweeteners, aspartame and acesulpham K. This mixture is seen to be a stabilized concentrate because water is then added to dilute the mixture (col. 8, lines 30-54).

The use of calcium carbonate is disclosed in col. 8, lines 30-54 and some of the other calcium containing ingredients as in claim 1, and acid containing ingredients as in claim 3 and sweeteners such as aspartame and acesulfame K as in claims 4-6 (col. 5, lines 5-14). A beverage concentrate as in claim 13 has been disclosed above and a full strength beverage as in claim 14 is disclosed in col. 8, lines 50-55. As the beverage contains a sweetener, it is seen that it is an effective amount to make a sweetened beverage.

Claims 1, 3-6, 13 differ from the reference in the use of particular sources of calcium. Yang et al. disclose low acid beverages, which are fortified with calcium. The calcium sources can be the claimed calcium sources (page 7, para. 0163). The reference discloses that mixed organic acid salts of calcium can be used (para. 0164) and acidic and basic sources of calcium can be used (para. 0158). Examples using calcium chloride and calcium hydroxide are disclosed in para. 00224 and 0226, para. 0240. The reference discloses that an advantage of using calcium citrate malate is that it permits formula flexibility in the selection of calcium, calcium hydroxide, carbonate and phosphate are mentioned specifically (para. 0327O). All the claimed calcium compounds are mentioned in claim 12 on page 14. Braun et al. disclose that it is known to use calcium chloride, and the other calcium products in a beverage (col. 5, lines 5-15, col. 7, lines 20-35, col. 11, lines 1-10). Nothing new or unobvious is seen in the use of the particular claimed calcium compounds absent a showing of unexpected results in using those compounds. Also, Burkes et al. disclose the use of calcium chloride with the other claimed calcium sources (col. 5, lines 25-40, col. 9, lines 33-45). Therefore, it would have been obvious to use various calcium salts in a beverage for their known functions, particularly as the functions such as addition of sourness are known (col. 6, lines 26-51). It is noted that applicants' specification states that particular combinations of calcium compounds give a cleaner taste in cola drinks (page 4, lines 1-21). However, the claims are not limited to cola drinks, and no side by side showing is seen that shows unexpected results from using the claimed compounds. Therefore, it would have been obvious to use known sources of calcium as disclosed by Yang et al., Burkes et al. and

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Braun et al. in place of the calcium sources of Gandhi because Gandhi says that various sources of calcium can be used (col. 5, lines 5-13).

Claim 7 further requires a preservative that is dissolved in the solution before the artificial sweetener is dissolved. Gandhi discloses the use of a preservative such as sodium benzoate as in claim 8 in a liquid concentrate containing the same ingredients except for the use of sugar instead of an artificial sweetener (sweetener). However, no patentable distinction is seen at this time in using a preservative with a sweetener or with sugar, as the preservative still performs its known function. Therefore, it would have been obvious to use the preservative of Gandhi in systems that contain artificial sweeteners.

Claims 9 and 10 further require acid-containing flavorings, which can be a cola flavoring, which is added before the sweetener, and claim 11 requires a combination of cola flavor and lemon flavor. Gandhi discloses the use of a cola flavor with calcium and corn syrup (col. 8, lines 1-29). Claim 9 requires that the acid-containing flavoring be dissolved before the addition of the sweetener. Citric acid can be considered a flavoring and is added before the addition of the sweeteners (col. 8, lines 48-54). Gandhi discloses other flavors. Nothing new or unobvious is seen in the addition of lemon flavoring, which is a well-known flavorant as in claims 11 and 12. Therefore, it would have been obvious to add acid ingredients before sweeteners as disclosed by Gandhi.

Claims 13 and 14 are also product by process claims. The fact that the procedures of the reference are different than that of applicant is not a sufficient reason

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for allowing the product-by-process claims since the patentability of such claims is based upon the product formed and not the method by which it was produced. See *In re Thorpe* 227 USPQ 964. The burden is upon applicant to submit objective evidence to support their position as to the product-by-process claims. See *Ex parte Jungfer* 18 USPQ 2D 1796. Therefore, it would have been obvious to make a beverage concentrate as claimed because the composition has been shown above as in Gandhi.

Claims 15 and 16 further require 5 parts water and the use of carbonated water respectively. However, the particular amount of water is seen as being within the skill of the ordinary worker and Gandhi discloses the use of carbonated gas, which would make a product that is carbonated including the water (col. 8, lines 40-45). Therefore, it would have been obvious to carbonate a product as disclosed by Gandhi, and it is known to dilute products with various amounts of water.

Claim 17 further requires making a dispersion of calcium salts and water, adding acids and then the artificial sweetener (col. 6, lines 20-40). Gandhi discloses adding calcium carbonate to water (col. 6, lines 20-24) and discloses adding aspartame to a solution containing calcium carbonate and lactic acid. Therefore, it would have been obvious to add calcium to water to make a solution and to add it to acid as disclosed by Gandhi.

The further limitations of claims 19-24 have been discussed above and are obvious for those reasons. Therefore, it would have been obvious to add a sweetener to a mixture made as in step 17 a and b.

Claims 25-27 further require adding acid containing flavoring to the second solution, which contains an acid. However, as above, it is known to add acid containing flavoring solution such as citric acid to a mixture of calcium and acids, which would have contained the same ingredients (col. 8, lines 30-44). No patentable distinction is seen in adding more acid type flavoring such as cola, and an innocuous flavoring such as lemon to an acid containing mixture. Therefore, it would have been obvious to add more acid containing flavors to a mixture containing an acid flavorant such as citric acid for their known flavoring functions. The limitations of claims 28-34 have been disclosed above and are obvious for those reasons.

Gandhi discloses the use of preservatives and gums as in claim 35 (col. 8, lines 30-55). Therefore, it would have been obvious to use further edible ingredients in the claimed composition.

Claims 36 and 37 further require fruit and tea flavor, respectively. Gandhi discloses the use of orange flavor (col. 9, lines 45-50). Nothing new is seen in the use of tea as a flavor as Gandhi discloses flavors broadly, and no new and unexpected results are seen to have been shown by the use of a tea flavor. Therefore, it would have been obvious to use known flavors in the claimed composition.

Claim 38 further requires the use of calcium chloride and two other salts and claims 39, 41 and 42 require particular combinations of salts which additionally. Gandhi discloses that other mineral salts can be used as well as hydroxides and carbonates (col. 5, lines 5-10). Braun et al. disclose that it is known to use calcium chloride, and the other calcium products in a beverage (col. 5, lines 5-15, col. 7, lines 20-35, col. 11,

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lines 1-10). Nothing new or unobvious is seen in the use of the particular claimed calcium compounds absent a showing of unexpected results in using those compounds. Also, Burkes et al. disclose the use of calcium chloride with the other claimed calcium sources (col. 5, lines 25-40, col. 9, lines 33-45). The further limitations of claims 42-59 have been disclosed above. Therefore, it would have been obvious to use various calcium salts in a beverage for their known functions, particularly as the functions such as addition of sourness are known (col. 6, lines 26-51).

Claim 60 is to preparing a full strength beverage. Gandhi discloses a full strength beverage (col. 6, lines 1-40). The further limitations of claim 60 have been discussed above as have been the limitations of claims 62-72 and are obvious for those reasons.

Gandhi discloses the process of claim 73 (col. 6, lines 1-40 and col. 8, lines 30-55). Citric acid as in claim 75 is disclosed as in col. 6 above, and aspartame as in claim 76 in col. 8, as above. Adding preservatives to the second solution as in claim 77 is disclosed in col. 6, lines 29-32. The calcium salts and edible acids are fully dissolved in the second solution because the solution is clear (col. 6, lines 20-25). Sodium benzoate is disclosed as in claim 78. Citric acid is considered to be an acid containing flavoring solution, which is added to the solubilized calcium-acid solution as in claim 79 (col. 6, lines 56-64). Column 6 discloses the use of a composition containing sucrose instead of a sweetener as in the above claims. Col. 8 discloses the use of aspartame, which is added after the calcium and acid mixtures have been combined. Gandhi discloses a full strength beverage produced by the method of claim 73 (col. 6, lines 1-40 and col. 8,

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lines 30-55). Therefore, it would have been obvious to add a sweetener in the process as disclosed in col. 6, lines 1-40, instead of a sugar.

The limitations of claims 79-82 have been discussed above and are obvious for those reasons.

Gandhi discloses adding a coloring agent as in claim 84 (col. 6, lines 20-36). Therefore, it would have been obvious to add coloring agents to the claimed composition.

The limitations of claims 86-87, 89-102 have been discussed above and are obvious for those reasons.

ARGUMENTS

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Hp 3-21-05


HELEN PRATT
PRIMARY EXAMINER